

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of Review)
of Proposed Groundwater)
Transfer Plan,)
ANDERSON FARMS COMPANY)
BERRENDA MESA WATER DISTRICT)
Proponents,)
COUNTY OF YOLO, ET AL.)
Complainants.)

Decision 1474

DECISION REGARDING PROPRIETY OF
PROPOSED GROUNDWATER TRANSFER

BY THE BOARD:

On September 2 and September 7, 1977, the State Water Resources Control Board (hereinafter the Board) held a public hearing to receive evidence regarding the proposed extraction of groundwater in eastern Yolo County for sale, storage, export, and subsequent use in Kern County. The hearing record was left open until September 19, 1977, for submission of briefs on policy and law. Proponents, complainants, and interested parties having appeared and presented evidence; the evidence received at the hearing and thereafter having been duly considered, the Board finds as follows:

Jurisdiction

1. This matter came before the Board both through referral by proponent Berrenda Mesa Water District (hereinafter the

District) and through several complaints filed pursuant to Article 17.4, Title 23, California Administrative Code. Even though the proposal involves groundwater over which the Board has limited jurisdiction, the referral and complaints have collectively raised the following three related issues over which the Board has jurisdiction:

(1) Would implementation of the proposal violate Section 764.20, Title 23, California Administrative Code (hereinafter the Emergency Delta Regulation)?

(2) Would implementation of the proposal violate any other law or principle of water rights?

(3) Would implementation of the proposal constitute a waste or unreasonable method of diversion of water, within the meaning of Article X, Section 2 of the California Constitution?

The first two issues were first raised during negotiations between the proponents and the Department of Water Resources (hereinafter the Department), whose facilities would be utilized to effect the transfer. The last issue was raised by the complaint.

Substance of the Project and Allegations

2. Andco Farms Co. (hereinafter Andco) farms approximately 11,335 acres of land in eastern Yolo County, partly on leased land. Historically most of its irrigation water supply has been diverted

from what is called the Toe Drain, a surface source. The Toe Drain is located on the westerly side of the Sacramento River Deep Water Ship Channel and is contiguous to Andco's land.

The Toe Drain's primary source of water is the Sacramento-San Joaquin Delta (hereinafter the Delta). Tidal action causes water from the Delta to back up into the Toe Drain through the Sacramento River, and Cache and Prospect Sloughs.

3. Based on the potential of increased salinity in this surface water source due to reductions in fresh water inflow to the Delta as a result of the drought, Andco caused 10 wells to be drilled on its property to provide an alternative source of irrigation water. It was estimated that approximately 4,900 acre-feet per month could be pumped from the 10 wells, although tests pertaining to well capacity were in progress and incomplete at the time of the hearings.

4. The District furnishes water for irrigation of approximately 46,000 acres in Kern County. The District does not utilize any local sources of water and presently relies totally on imported supplies from the State Water Project (hereinafter SWP). Because of the drought, the District has received less than 50 percent of its requested amount of water from the SWP during 1977.

5. Approximately 28,000 acres served by the District have permanent plantings some or all of which could be lost if SWP water is further curtailed or completely unavailable during the 1978 irrigation season.

6. Seeking an alternate supply of water, the District entered into negotiations with Andco seeking the purchase of water. These negotiations led to an original proposal whereby Andco would continuously pump groundwater at the capacity of their new wells for a 12-month period. Part or all of the water would be released into the Sacramento River near Rio Vista or used for irrigation on the Andco fields in lieu of its normal diversions of water from the Toe Drain. This water would comingle with the Sacramento River flow via Cache Slough near Rio Vista and serve downstream uses including control of salinity in the Delta. During those times when the pumped groundwater is being used for irrigation by Andco, it is contended that Andco's normal surface diversions from the Toe Drain would be reduced by an equivalent amount, therefore having the same result on Delta flows as if the total amount of groundwater pumped were discharged into the Toe Drain.

7. The proposal envisions the use of SWP facilities. Evidence presented at the hearing indicated these facilities could be used in either of two ways.

a. First, releases from Oroville Reservoir by the Department could be reduced by an amount equivalent to the groundwater being pumped, and the District would be given a credit for water in storage at Oroville.

b. Or, secondly, such amount could be pumped by the Department at its Delta Pumping Plant into San Luis Reservoir and held there. The net effect under either method

is said by the proponent District not to change Delta flow characteristics as they relate to other uses. Pursuant to the proposal, this stored water would be credited to the District for use in 1978 and would ultimately be transported south to the place of use through SWP facilities.

8. At the hearing, the proponent District modified the proposal. The modification would be to start with a 90-day experimental pumping period to be carried out under the direction of the State Board. During this period the pumping activities would be monitored to determine the effects on the groundwater basin(s), and if in the judgment of the Board, adverse effects were discerned, the Board would order an immediate end or modification to the pumping.

9. Complaints were received from several individual farmers and landowners in eastern Yolo County, together with petitions signed by persons residing in or near the City of Davis. These complaints either allege that the pumping is unreasonable because of the adverse effects it would have, including impairment of the operation of other wells in the area, or request that the pumping not be initiated until it is established that the proposed operation will have no adverse effects on the groundwater basins of Yolo County.

Findings Regarding Export of Water from the Delta and Water Rights Issues

10. This Board has recognized that a continuation of the current unprecedented drought conditions could result in shortages of water for emergency municipal and domestic uses. We have further recognized that unless sufficient water is stored in upstream reservoirs, massive intrusions of seawater into the Delta would occur should 1978 be a critically low runoff year. Pursuant to this recognition, the Board has prohibited through its Emergency Delta Regulation export of water from the Delta unless needed to meet emergency municipal, domestic or other essential uses.

(Section 764.20(c)(3), Title 23, California Administrative Code.)

11. Our review of the proposal leads us to conclude that its implementation would result in a diminution of flows into the Delta within the meaning of the Emergency Delta Regulation. For the reasons discussed below, we cannot accept the proposition that the net contribution of new water to the Sacramento River and thus to the Delta will equal the amount pumped.

a. First, the proposal assumes that Andco will have surface water rights sufficient to satisfy its entire irrigation demand in 1978 even in the event of a drought year. No evidence was presented at the hearing on this issue other than the staff water rights report. This report concludes that Andco's claim of riparian right is probably valid for most of their land. According to this uncontroverted report, availability of water in the Delta for riparian uses during 1977 was substantially less

than the amount demanded during the summer months. If the drought continues this gap between the amount available for riparian use and the amount demanded will widen. If this is the case, Andco's riparian right may not allow it to fully meet its irrigation needs in 1978. To the extent this is true, the credit claimed for reduced surface diversions when the pumping is taking place is obviously overstated in terms of right and would have to be adjusted accordingly.

b. Secondly, for still another reason, the contention that the proposal would result in net contributions to the river and thus the Delta equal to the pumping is incorrect. This issue, like the water rights question discussed above, was noticed as a topic upon which information was to have been submitted at the hearing. Again, the only evidence presented concerning the question of effects the project would have on the flow in the Sacramento River was by the staff. This evidence was essentially uncontroverted. It established that the proposed pumping would create a large cone of depression. Much of the recharge of such a cone could come from the Sacramento River. Such losses from the river, ultimately reflected in decreased surface flow, would not only decrease any credit proposed for discharging pumped groundwater but could also cause an interference with prior or correlative water rights since the losses to the river stemming from recharge to the cone of depression would be upstream from the proposed

discharge of groundwater. The U. S. Bureau of Reclamation (hereinafter the Bureau) presented no evidence, but protested the proposal on the basis of adverse effects on Bureau water rights and Delta water quality, which is in line with Board staff evidence.

c. Third, it does not appear that the proposal would result in more water being available for storage in Oroville Reservoir during the period starting October 1, 1977, and extending into 1978, with a cutoff dependent upon runoff conditions next year. According to the Department's Plan of Operations of SWP facilities for July 1977 through December 1977, the Department's releases of water from Oroville Reservoir will be lowered by October 1, 1977, to the minimum necessary to meet agreements reached by the Department with the Department of Fish and Game for fish protection (SWRCB Decision 1275, DWR Exhibit 120). This being the case, the Department may well be precluded from further reducing releases from Oroville Reservoir since the fish standards apply at the Feather River below Thermalito Afterbay, whereas Andco's proposed discharge would enter the Delta near Rio Vista. If reductions directly attributable to the proposal could not be made in Oroville releases, obviously a credit for Oroville storage could not be obtained and the alternative of simultaneous pumping groundwater into San Luis would have to be pursued. No hard evidence about the feasibility of such an alternative was offered by the District.

d. Fourth, any transfer by the Department could require a carriage component for salinity repulsion that would result in less yield to the District than Andco would pump. Also, storage by the Department could cause evaporation and conveyance losses that would further reduce the yield.

12. The foregoing leads us to conclude that the plan would result in an export of water from the Delta within the meaning of the Emergency Delta Regulation. This regulation will remain in effect no longer than necessary to protect the Delta or December 31, 1977, whichever is earlier, unless extended beyond that date by the Board. Since implementation of the proposal would begin well before that date and since continuation of the proposal assumes a continuation of the drought, in which event extension of the Emergency Delta Regulation is a reasonable possibility, we feel it appropriate to consider the proposal fully governed by this regulation. It is clear that the proposed agricultural use is not an emergency municipal or domestic use and thereby exempt from the export prohibition. This being the case, the proposed use can take place only upon approval of this Board and then only after a finding that the use is an essential use other than municipal or domestic. (Section 764.20, Title 23, California Administrative Code.)

13. Whether water for permanent agricultural crops, specifically trees and vines, would be an essential use must be determined on a case-by-case basis, after consideration of numerous factors. These factors include the availability of water from other sources and the amount of water available for emergency municipal and domestic uses. Based upon the lack of evidence in the record regarding the above-mentioned critical factors, the Board is precluded from finding at this time that the uses of water under the instant proposal should be characterized as an "essential use" in terms of the Emergency Delta Regulation. For example, it is unknown at this time how much of the Oroville-San Luis supplies will be needed for municipal and domestic purposes. The extent to which other areas may have permanent crops in grave jeopardy should 1978 be a critically dry year was also not known.

Public Interest Considerations

14. It is appropriate to comment on some of the public interest issues of the subject proposal. While we recognize our limited jurisdiction over some of these issues as they relate to percolating groundwaters, such issues are important to understanding the ramifications of proposals such as this.

15. This proposal has been portrayed as an example of conjunctive use of surface water and groundwater supplies. We support coordinated use of surface and groundwater supplies as a logical vehicle for meeting the Constitution's requirements that the

waters of the State be put to their fullest beneficial use and not wasted or unreasonably used. (Section 2, Article X, California Constitution.) However, proposals characterized as involving conjunctive use must stand on their individual merit. Factors such as whether the proposal would interfere unreasonably with the rights of other users either at the extraction or recharge stage and whether replenishment of the extracted groundwater will occur must be explored. Such factors have not been fully explored in this case.

16. In implementing the instant proposal, Andco would be extracting water from a large groundwater basin in eastern Yolo County. Under California water rights law, Andco shares this source with other overlying owners on a correlative basis. Only in the event of surplus in the supply above the reasonable requirements of overlying lands should water be appropriated for nonoverlying uses. (Katz v. Walkinshaw 141 Cal. 116, 135; 74 Pac. 766, 772 (1903); Los Angeles v. San Fernando 14 Cal.3d 199, 293; 53 P.2d 1250, 1318 (1975).) State facilities should not be utilized to export groundwater pumped by and for the benefit of only one overlying owner without a clear indication of absence of unreasonable interference in the access of other overlying owners to the common resources.

17. No one at the hearing appeared to disagree with the proposition that the proposal would have a significant effect on the environment, requiring compliance with the requirements of the

California Environmental Quality Act. The District appeared to acknowledge its responsibility as lead agency at the hearing itself. However, since no environmental document has been prepared, even the District's proposal for a 90-day experimental pumping period is premature, and could not be sanctioned by this Board. (California Public Resources Code Sections 21000 et seq.)

18. The State Legislature has clearly stated that there is a public interest in protecting groundwater basins:

"It is hereby declared that the people of the State have a primary interest in the correction and prevention of irreparable damage to, or impaired use of, the ground water basins of this State caused by critical conditions of overdraft depletion, sea water intrusion or degraded water quality." (Section 12922, Water Code.) (Emphasis added.)

This Board has the further statutory authority to hold hearings on the necessity for restricting groundwater pumping in order to protect the quality of water from destruction or irreparable injury. (California Water Code Section 2101.) In this connection it is noted that evidence was received that the creation of a steep westward pressure gradient from the Sacramento River -- a certain effect of the proposed heavy pumping -- would likely pull poor quality water to the west, thus degrading the water further to the east. This poor quality water, located near the Sacramento River has high manganese, iron, and hydrogen sulphite contents. We believe that when initiation of groundwater extraction may cause or increase a water quality problem, such water quality impacts must be fully analyzed and resolved. Such analysis is not part of the instant record.

19. In reviewing this program, we have been mindful of our limited jurisdiction over percolating groundwaters and recognize that no application for a permit to appropriate percolating groundwater is required by law. (Water Code Sections 1200 and 1201.) It should be noted that the Governor's Commission to Review California Water Right's Law is studying the issue of groundwater rights. To the extent that such review may lead to approaches to coordinate surface and groundwater rights, problems such as those raised by the instant proposal could be resolved in a more orderly manner.

Findings as to Waste, Unreasonable Use, Unreasonable Method of Use and Unreasonable Method of Diversion

20. The proscriptions of Section 2, Article X of the California Constitution, apply to all waters of the State, including percolating groundwater (Peabody v. City of Vallejo, 2 Cal.2d 351 (1935)). The evidence does not support a finding of waste or unreasonable use. Quite the contrary, the proposed use itself is beneficial, reasonable, and badly needed. Rather, the problem presented by this proposal as it relates to the Constitutional provision involves the question of the unreasonableness of the proposed method of diversion.

Many factors considered by this Board lead to our conclusion that the proposal could result in an unreasonable method of diversion. These include the reasonable possibility that the proposal would seriously aggravate overdraft conditions, the

water quality implications of the proposal, the probable adverse effects on surrounding wells, the potential effects on Sacramento River flows, and the fact that Andco has only correlative rights to the use of waters from the groundwater basin. While evidence sufficient to conclusively deal with many of these issues was lacking, the cumulative effect of the unknowns involved prevents us from saying that the method of diversion is reasonable. Advance consent cannot be given by this Board to transfers of water from one area to another which may be unreasonably detrimental to water users from the area of transfer. We want it well understood, however, that we do not mean to discourage innovative attempts to transfer water in times of need. What we are saying is that such proposals must be well thought out and not have the potential of unreasonably harming others.

DETERMINATION OF ISSUES

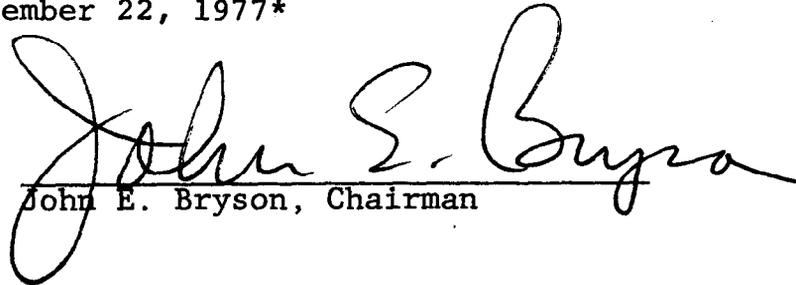
1. The instant proposal would result in an export of water from the Delta within the meaning of the Emergency Delta Regulation. We cannot, at this time, characterize the proposed use of water as an essential use within the meaning of that regulation.
2. On the record, implementation of the proposal does not appear to be in the public interest.
3. The evidence presented at the hearing raises a substantial question as to whether extraction of water, as proposed,

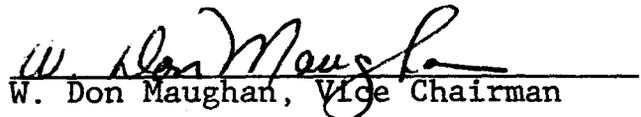
from the groundwater basin would constitute a reasonable method of diversion in accordance with Section 2, Article X of the California Constitution.

ORDER

IT IS HEREBY ORDERED that the Executive Director, Water Rights and Administration, transmit this decision to the Department of Water Resources and all other parties for action consistent herewith.

Date Conclusions Adopted: September 22, 1977*


John E. Bryson, Chairman


W. Don Maughan, Vice Chairman


W. W. Adams, Member

* Findings Supporting
Conclusions Adopted October 20, 1977



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